

Cu Aerial - Hard Drawn (Covered)

Cu Covered Aerial - Hard Drawn 25mm²

Contact

General Sales inquiries
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Nexans ref.: BAAT16AA001AABK

Country ref.: 4277

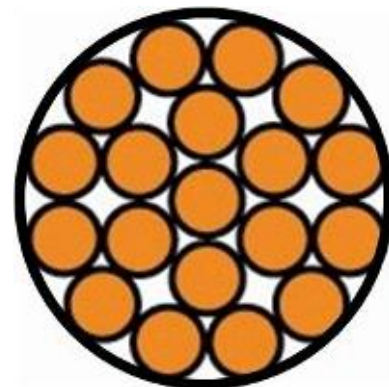
Hard Drawn Copper conductor, PVC Cover. Made to AS/NZS 5000.1.

DESCRIPTION

The HDCu aerial has lower elongation and increased tensile rating compared to annealed copper conductors.

The PVC covering contains a high level of carbon black for UV resistance. The covering is not considered as an electrical insulation.

This type of aerial cable is designed for harsh environments such as coastal areas; the conductor is protected by the PVC covering to reduce the risk of aluminium corrosion.



STANDARDS

National AS/NZS 5000.1

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Cu Covered Aerial - Hard Drawn 25mm2

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CHARACTERISTICS

Construction characteristics

Conductor material	Copper
Insulation	PVC

Dimensional characteristics

Conductor cross-section	25 mm ²
Stranding (No./mm)	7/2.14
Nominal insulation thickness	1.2 mm
Nominal overall diameter	9.3 mm
Approximate weight	0.3 kg/m
Conductor diameter	6.75 mm

Mechanical characteristics

Minimum breaking load	10.4 kN
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Usage characteristics

Maximum operating temperature	75 °C
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ELECTRICAL PERFORMANCE DATA

Cross Sectional Area (mm ²)	Calculated DC Resistance at 20°C (0hm/km)	Reactance at 50Hz with 300mm Spacing (0hm/km)	Current Rating Still Air (Amps)	Current Rating 1 m/s (Amps)
6	3.17	0.365	45	81
10	1.88	0.349	63	110
16	1.18	0.334	84	147
25	0.749	0.314	115	194
35	0.540	0.306	141	235
50	0.399	0.295	172	281
70	0.276	0.285	218	353
95	0.198	0.273	266	421

NOTE

1. Coefficient of linear expansion $17.0 \times 10^{-6}/^{\circ}\text{C}$.
2. Modulus of elasticity:
112 GPa for seven (7) wire conductors.
110 GPa for nineteen (19) wire conductors.
108 GPa for thirtyseven (37) wire conductors.

Current ratings are based on ambient temperature of 30°C, a maximum conductor temperature of 75°C, rural weathered, summer noon and intensity of solar radiation 1000 W/m².